

REMARKS/ARGUMENTS

Claims 1-11 and 13-16 are currently pending in this application. By the present amendment, claims 1, 3, 4, 5 and 16 have been amended. Applicant respectfully submits that no new matter has been introduced into the application by these amendments.

CLAIM OBJECTIONS

In the Action, objections were noted with respect to claims 1, 3, 4 and 5 due to a number of minor informalities. Applicant has amended the claims in accordance with the suggestions noted in the Action such that proper antecedents are provided and such that the plumbing fixture is not positively recited and the claims are directed to the sub-combination of the aerator. Accordingly, withdrawal of the objection to the claims is respectfully requested.

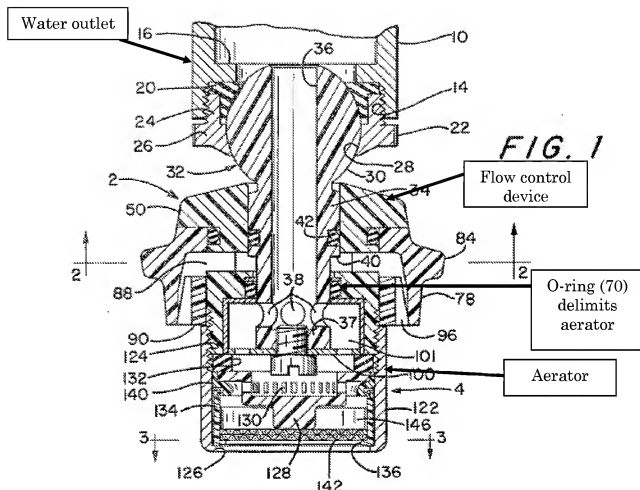
CLAIM REJECTIONS – 35 U.S.C. §102

Claims 1, 2 and 4 were rejected under 35 U.S.C. §102(b) as anticipated by U.S. 3,902,671 to Symmons. Applicant respectfully traverses this rejection.

Claim 1 is directed to an aerator for a plumbing fixture, with the plumbing fixture having a water outlet (2). An aerator (4), through which water flows, is pivotally mounted via a swiveling mechanism and is removably fixed to an outlet end of the water outlet. The pivotable aerator (4) is mounted within an outer ring (5) which is adapted to be threadingly engaged and at least partially received within the outlet end such that the pivotable aerator is located at least partially within the outlet end.

Symmons discloses a spray aerator for attachment to water taps, comprising a valving member, spray-forming means and an aerator assembly. As shown in Figure 1, reproduced and annotated below, the aerator in Symmons is not adapted to be received within the outlet end such that the pivotable aerator is adapted to be located at least partially within the outlet end. A flow control device (2), coupling (22), ball (30), and spray cap (78) physically separate the water outlet (10) and the aerator assembly (4).

The Action states the ball (30) is part of the aerator, however, this is not correct. The device switches between non-aerated and aerated flow. (Col. 4, lines 58-63). O-ring (70) (See Figure 4) delimits the aerator assembly and keeps water from entering it in the non-aerated position. (Col. 5, lines 5-8). But water comes through ball (30) so the position stated in the Action is incorrect. The annular faucet attaching member or coupling (22) attaches to the internal screw thread (14) of the outlet (10). The coupling (22) forms a spherical seal for a ball (30) on the end of a swivel member (32). A stem section (34) connects with the flow control device (2), which includes flow-switching member (50). However, the aerator (4) is attached to the lower end of this member (50). Therefore, Symmons does not disclose the aerator is at least partially received within the outlet end such that the pivotable aerator is adapted to be located at least partially within the outlet end, as required by claim 1.



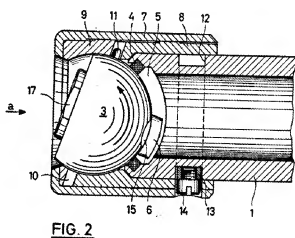
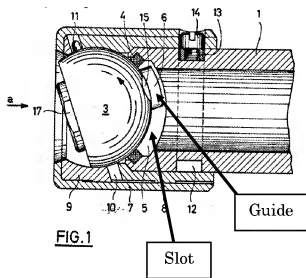
Accordingly, withdrawal of the §102 rejection of claim 1 in view of Symmons is respectfully requested. Claims 2 and 4 depend from claim 1, and they should similarly be patentable over this reference.

Claims 3, 5-10, 13, 15 and 16 were rejected under 35 U.S.C. §102(b) as being anticipated by DE 3205205.

Claim 3 requires an aerator which is pivotally mounted via a swiveling mechanism and is adapted to be removably fixed to an outlet end of the water outlet. The aerator (4) is mounted completely or at least partially within a ball or spherical segment (6) of the swiveling mechanism which comprises a ball-and-socket joint, swivelable in any direction, and an outer ring (5) of the ball-and-socket joint, in which

the ball or spherical segment is mounted, is adapted to be located so that the outer ring and the aerator are at least partially within the outlet end.

DE 3205205 discloses a ball and socket joint having a single axis of movement due to the guide (6) moving in the slot (5). DE 3205205 fails to disclose a ball-and-socket joint swivelable in any direction, as required by claim 3. As shown in Figures 1 and 2 below, the motion of the ball and socket joint, indicated by the arrow pointing in the counter-clockwise direction, only allows for movement along a single-axis. Also, DE 3205205 fails to disclose an aerator in the outlet end.



DE 3205205 - Figures 1 and 2 (annotated)

Accordingly, withdrawal of the §102 rejection of claim 3 in view of DE 3205205 is respectfully requested. Claims 5-10, 13 and 15 depend from claim 3 and should similarly be patentable over DE 3205205.

With respect to claim 16, this claim also requires that the pivotable aerator (4) to be mounted completely or at least partially within an outer ring, which is fixed in the outlet end so that the outer ring and the aerator are at least partially within the outlet end. Further, claim 16 requires a cylindrical or partially cylindrical section (15 in Figs. 3 and 4), which is placed in a correspondingly shaped recess (16) of the outer ring, that projects on an outer side of the aerator (4) as a bearing about which the aerator rotates. The “kugel 3” of DE 3205205 is a “ball” which is spherical do that it can rotate in the

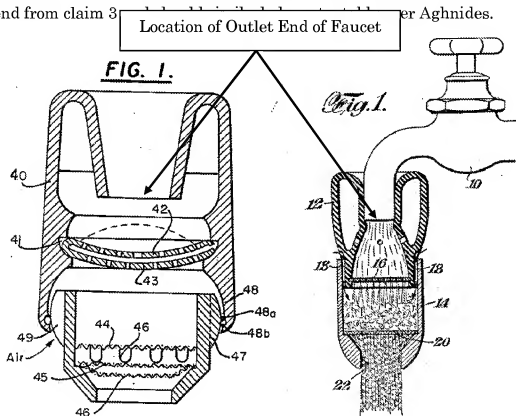
ating seat provided by elements 8 and 9. This is not a cylindrical or partially cylindrical section about which the aerator rotates. Accordingly, withdrawal of the §102 rejection of claim 16 in view of DE 3205205 is respectfully requested.

Claims 3, 6, 8-10 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 3,067,953 to Aghnides.

Aghnides discloses an aerator with a casing adapted to be connected to a faucet, including orifices in a disc and mixing means provided by a screen. As shown in Figure 1, reproduced below, Aghnides discloses a rubber body (40) that can be connected to a faucet end which has a groove in which discs (42, 43) are seated. Water flows from the discs to the screens (44, 45) and corrugations (46). The screens are mounted in a ball (47) which is rotatable in a socket (48). In terms of attaching the rubber body to a faucet, Aghnides discloses the invention “employs a rubber element for engaging the faucet in a manner similar to that shown in any aforesaid prior Patent 2,316,832.” (Col. 1, lines 48-50). Patent 2,316,832 does not explicitly show how the disclosed rubber body is inserted into the faucet, but relies on Patent 2,210,846 as disclosing the same type of rubber tap connector. Figure 1 of Patent 2,210,846, reproduced below, clearly shows how the rubber tap is inserted onto the outlet end of a faucet. As shown below, the tap connector (12), attaches to the end of the outlet of the faucet (10). Therefore, the rubber body disclosed by Aghnides may only be inserted onto the outlet end of the faucet up to the point shown in Patent 2,210,846. As shown by the annotated version of Figure 1 of Aghnides, the outlet end of the faucet is located in the upper portion of the rubber body (40). Because the outlet end terminates within the upper portion of the rubber body, none of the aerator elements are adapted to be located at least partially within the outlet end. Accordingly, Aghnides fails to disclose, “a ball-and-socket joint, swivelable in any direction, and an outer ring (5) of the ball-and-socket joint, in which the ball or spherical segment is mounted, is adapted to be located so that the outer ring and the aerator are at least partially within the outlet end,” as required by claim 3.

Additionally, Aghnides appears on its face to be inoperable for its intended

purpose. As shown below, air is indicated as entering the narrow groove (49) of the ball (47) between the diaphragm (43) and the screen (44) in order to aerate the water flow. However, the arrangement illustrated would allow in water to flow out where the air flow is indicated in Figure 1 since the opening directly faces the water flow. Therefore, the device cannot function as required by claim 3. Accordingly, withdrawal of the §102 rejection of claim 3 in view of Aghnides is respectfully requested. Claims 6, 8-10 and 15 depend from claim 3.



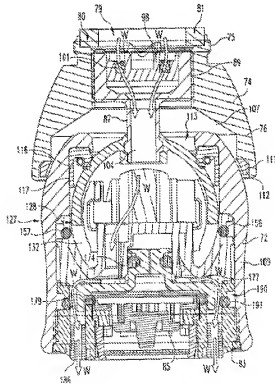
Aghnides – Figure 1

Patent 2,210,846 – Figure 1

Claims 1-4, 6-10, 14 and 15 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 7,472,846 to Thomas et al.

Thomas et al. discloses an integrated swivel spray aerator with diverter. As clearly shown in Figure 4, reproduced below, the aerator has an inlet port (79), a gasket (81), and a gasket groove (80). The connector (75) is externally threaded for threading onto a faucet. Therefore, it is clear that the entire aerator assembly is not in the ring-shaped holder that connects to the water outlet. Claim 1 requires, in part,

“the pivotable aerator (4) is mounted within an outer ring (5) which is adapted to be threadingly engaged and at least partially received within the outlet end such that the pivotable aerator is located at least partially within the outlet end.” Claim 3 requires, in part, a “swiveling mechanism which comprises a ball-and-socket joint, swivelable in any direction, and an outer ring (5) of the ball-and-socket joint, in which the ball or spherical segment is mounted, is adapted to be located at least partially within the outlet end.” Thomas et al. fails to disclose these limitations, as the aerator assembly is not located in the ring-shaped holder that is connected to the water outlet end. Accordingly, independent claims 1 and 3 should be patentable over Thomas et al. Claims 2, 4, 6-10, 14 and 15 depend from either claims 1 or 3 and should similarly be patentable over Thomas et al.



Thomas et al. – Figure 4

CLAIM REJECTIONS – 35 U.S.C. §103

Claim 5 was rejected under 35 U.S.C. §103 as unpatentable over Symmons. Claim 5 depends from claim 1 and should be patentable over Symmons for the reasons noted above. Accordingly, withdrawal of the §103 rejection of claim 5 in view of Symmons is respectfully requested.

Claims 5 and 14 were rejected under 35 U.S.C. §103 as unpatentable over Thomas et al. Claims 5 and 14 depend from claims 1 and 3, respectively, and should be patentable over Thomas et al. for the reasons noted above. Accordingly, withdrawal of the §103 rejection of claims 5 and 14 in view of Thomas et al. is respectfully requested.

Claim 14 was rejected under 35 U.S.C. §103 as unpatentable over DE 3205205. Claim 14 depends from claim 3 and should be patentable over DE 3205205 for the reasons noted above. Accordingly, withdrawal of the §103 rejection of claim 14 in view of DE 3205205 is respectfully requested.

CONCLUSION

If the Examiner believes that any additional minor formal matters need to be addressed in order to place the present application in condition for allowance, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the present application, including claims 1-11 and 13-16, is in condition for allowance, and a Notice to that effect is respectfully requested.

Respectfully submitted,

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